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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,060	01/10/2001	Normand R. Marceau	19364-085334 8358 EXAMINER	
28886	7590 06/28/2004			
CLARK HILL, P.C. 500 WOODWARD AVENUE, SUITE 3500			BOYD, JENNIFER A	
DETROIT, MI 48226		L 3300	ART UNIT	PAPER NUMBER
		•	1771	
			DATE MAILED: 06/28/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	09/758,060	MARCEAU ET AL.	
Office Action Summary	Examiner	Art Unit	
	Jennifer A Boyd	1771	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address	S
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ti y within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS fron , cause the application to become ABANDONE	mely filed ys will be considered timely. n the mailing date of this commun ED (35 U.S.C. § 133).	nication.
Status			
1) Responsive to communication(s) filed on 15 A	pril 2004.		
· · · · · · · · · · · · · · · · · · ·	action is non-final.		
3) Since this application is in condition for alloward closed in accordance with the practice under E	•		its is
Disposition of Claims			
4) ☐ Claim(s) 1-6 and 12 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 and 12 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10)☐ The drawing(s) filed on is/are: a)☐ acce			
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Ex	·	•	` '
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage	e
Attachment(s)	_		
I) ⊠ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail D		
Paper No(s)/Mail Date		Patent Application (PTO-152)	,

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## **DETAILED ACTION**

#### Response to Amendment

- 1. The Applicant's Amendments and Accompanying Remarks, filed April 15, 2004, have been entered and have been carefully considered. Claims 1 and 3 are amended, claims 7 11 are cancelled, claim 12 is added and claims 1 6 and 12 are pending. In view of Applicant's Amendments, the Examiner withdraws all previously set forth rejections as detailed in paragraphs 2 5 of the previous Office Action dated March 6, 2003. Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.
- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

# Claim Rejections - 35 USC § 103

3. Claims 1 – 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandoe et al. (US 2001/0036788) in view of Copperwheat (US 6,008,149).

Sandoe is directed to a vehicle headliner and laminate (Title).

As to claim 1, Sandoe teaches that the headliner comprises a core layer sandwiched between two stiffening layers (Abstract). Sandoe teaches that the core layer comprises a batt comprising polyester (page 1, [0012]). Sandoe teaches that the core layer has a basis weight in the range of 6 – 24 ounces per square yard (page 1, [0014]). In order to understand the meaning of "loosely" intertangled fibers, the Examiner looked to the Applicant's Specification. According to the Applicant's Specification, the core layer has a density of about 10 – 30 ounces per square

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yard, which largely overlaps with Sandoe's density range of 6 – 24 ounces per square yard (page 1, [0014]). Therefore, it is the position of the Examiner that the core batt material of Sandoe is "loosely" intertangled. Sandoe teaches that the two stiffening layers comprise a batt of similar or dissimilar blends of nonwoven fibers (page 3, [0030]). Sandoe teaches that the fibers of the two stiffening layers can be the same fibers as the core (page 3, [0031]). Sandoe teaches that the core fibers can comprise bicomponent fibers such as sheath-core PET fibers (page 3, [0012]); therefore, the two stiffening layers can comprise bicomponent fibers. In order to understand the meaning of "densely" intertangled fibers, the Examiner looked to the Applicant's Specification. According to the Applicant's Specification, the pair of bi-component layers have a density of 3 – 20 ounces per square yard, which largely overlaps with Sandoe's density range of 3 – 24 ounces per square yard for the stiffening layers. Therefore, it is the position of the Examiner that the stiffening layers of Sandoe are "densely" intertangled.

As to claim 2, Sandoe teaches that the headliner can further comprise a decorative fabric covering 18 (page 3, [0033]) located on one side of one of the stiffening layers 16 (see Figure 2).

As to claim 4, Sandoe teaches that web adhesive layers 20 and 22 are located between the core layer and stiffening layers (page 3, [0034] and Figure 2).

As to claim 5, Sandoe teaches that the core layer batt can comprise binder fibers (page 2, [0027]) such as a blend of high and low melting point thermoplastic fibers (page 2, [0027]).

As to claim 6, Sandoe teaches that the headliner is recyclable (page 2, [0018]).

As to claims 1 and 3, Sandoe fails to teach that at least one of the bicomponent layers is needled with the fibers of the core layer to intertangle the respective fibers and attach the

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bicomponent layer to core layer and specifically, in regards to claim 3, needling and intertangling the fibers of both bicomponent layers to the core layer. As to claim 12, Sandoe fails to teach that the fibers of the core layer are orientated vertically.

Copperwheat is directed to a moldable composite article useful automobile truck liners (column 1, lines 15 – 20). Copperwheat teaches a composite article as seen in Figure 1 comprising a layer of variable compression fabric 2 sandwiched between a formable fabric layer 5 and a formable fabric layer 8 (column 3, lines 35 – 40). Copperwheat teaches that adhesive layers are interposed between variable compression fabric layer and formable fabric layers 5 and 8 (column 3, lines 40 – 50). Copperwheat teaches that a facing fabric layer may be attached to the upper surface of the formable fabric layer 5 by means of an adhesive (column 3, lines 54 – 56). Copperwheat teaches that the cohesion between the functional fabric layers may be enhanced by such mechanical means as needlepunching and/or by adhesive means such as spray power bonding, the use of liquid dispersion/solutions, flame lamination and/or the interposition of an adhesive layer and combinations thereof (column 4, lines 38 – 49). It should be noted that by needlepunching the functional fabric layers at least a portion of the fibers will be oriented vertically.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to needle the fibers of the core layer with both of the bicomponent layers to attach and intertangle the fibers as suggested by Copperwheat in the headliner composite of Sandoe motivated by the desire to further enhance the cohesion between the layers to increase the durability and integrity of the headliner.

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### Response to Arguments

4. Applicant's arguments with respect to claims 1 – 6 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Brow (US 6,048,809) is directed to a vehicle headliner formed of polyester fibers (Title). Brow teaches multiple nonwoven layers comprising bicomponent fibers (column 2, lines 35 – 65). Brow teaches that the layers can be secured by adhesive or by interneedling (column 1, lines 65 – 68 and column 2, lines 1 – 5) but fails to teach that the layers can be secured by adhesive in conjunction with interneedling.

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6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 571-272-1473. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fennifer Boyd

Juf Bossl

June 23, 2004

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Primary Examiner Tech Center 1700